



Sand and Gravel Rulemaking – November 2003

Rulemaking Report

- **What is the purpose of the rule or rule amendment?**

Sand and gravel mining is a highly emotional issue with diverse opinions on whether or not such mining should even be allowed, and if so the right way to accomplish it. The Missouri DNR Land Reclamation Program is charged with permitting, inspecting and releasing operators throughout the life of their sand and gravel permit activities. The agency needs to be consistent, fair and impartial in performing these tasks, and therefore needs standards by which to provide implementation. While there is some disagreement about whether or not such mining in Missouri streams should be allowed, there is general consensus that fair and consistent standards are needed. The purpose of this rule is to set a standard by which Missouri streams will be protected while extracting sand and gravel resources from the stream environment.

- **What authority does the department exercise to carry out this rulemaking?**

The authority for the department and the Land Reclamation Commission is found at 444.530 RSMo.

- **What does the rule require and how does it produce environmental benefits?**

The rule requires that operators stay out of the flowing water of a stream so that aquatic life is not disturbed, nor will the stream dynamics of the water movement be altered. Also the rule requires that the protective bank vegetation will be left in tact to aid in the control of erosion of the adjacent lands during high water events.

- **Are there other effects (positive or negative) that may accompany the rulemaking?**

Once these standards are in place throughout the mining industry, the department will be able to begin to measure the effects of mining on streams. A few years of this data that will be available after all operators apply the same standards of protection will help to determine scientifically how to amend the standards of stream protection in the future.

- **What would happen without the rulemaking?** (short and long term consequences)

Short Term:

The department and the industry have already experienced the effects of not having rules that outline stream protection standards. The industry has given testimony in both legislative and public hearings stating that operators currently have a variety of stream protection targets, depending on when their permit was issued, which inspector reviewed the application, comments from landowners and the public, etc. The industry prefers that stream protection standards be written into rule so that all operators have the same expectations of stream protection, and so that when new sites are contemplated, the operator knows up front what the stream protection goal will be and how to implement it.

Long Term:

Today it is unknown what the effects of sand and gravel extraction from the stream environment will be. We have seen many sites where there are no apparent effects, yet some sites have resulted in permanent damage to streams, such as head cutting, bank destabilization, and downstream sedimentation. The desire for the long term is that proper and consistent stream protection will leave Missouri streams in tact for future generations to enjoy.

- **Are there other ways these benefits could be obtained?** (and why they were not chosen)

There are no federal rules regarding stream protection standards, although there are provision of the Clean Water Act that do apply to degradation of streams. The US Army Corps of Engineers originally implemented sand and gravel regulation, based on that Act. However, a federal lawsuit in the late 1990's terminated the COE jurisdiction to perform this function.

Missouri could have implemented protection of its own through the Clean Water Act; however, the decision was made to regulate this activity through the Land Reclamation Act, since it is a mining activity.

For some time, sand and gravel mining has occurred without specific stream protection standards. The results of this have not been satisfactory to many groups because of the inequitable way that sites are regulated, because operators often do not know how to extract the gravel and protect the streams in the process, and because legal actions require specific standards by which careless actions must be judged.

Some comments have been made that landowners will ensure stream protection, and therefore rules are not needed. Landowners are indeed often the best stewards of the state's resources. However there have been many occasions in which landowners have been victims of extremely poor extraction practices and the damages that have occurred to streams in these cases have been devastating.

The Land Reclamation Commission, the Department and all the members of the stakeholder workgroup came to a majority consensus to write these stream protection standards into rule.

- **Who is affected by the rulemaking?** (who will bear the requirements and get the benefits)

Commercial operators who extract and sell sand and gravel will be subject to this rulemaking. Landowners who extract the product for their own use and local governments who extract product with their own equipment are both exempt by statute. This rulemaking will not impact their exemptions.

Landowners and the public at large will benefit from standards of stream protection that will be implemented throughout the sand and gravel extraction industry. The operators themselves will also benefit by having published standards by which they can plan their business operations. They will not need to negotiate standards in order to make plans.

- **How much will the rulemaking cost?** (private and public sector costs, even if federally required)

The operators were part of the process of crafting the language of this rulemaking. They publicly explained to the Land Reclamation Commission that this language would not add to their cost of mineral extraction. Likewise, there are no anticipated costs to public agencies.

- **Does the rulemaking have any effect on state revenue?** (how and how much.)

No, there are no changes to fees or costs by this rule to the state of Missouri.

- **Why is the rulemaking being proposed now?** (the circumstances that brings about this action now.)

The jurisdiction to regulate sand and gravel mining by the Corps of Engineers was halted in 1998. In 1999 the Land Reclamation Commission first discussed the need for stream protection standards, and the first efforts to write these standards occurred in 2000. Between 2000 and 2003, the department has met numerous times with the public to discuss proposed rules. In late 2002 and early 2003, a workgroup appointed by the Land Reclamation Commission met monthly to craft these proposed rules. The Land Reclamation Commission voted in May of 2003 to use this language to formalize the stream protection standards into rule, and that brings us to this proposed rulemaking at this time.

- **Who was involved in developing the rule?** (stakeholders, commissioners, citizens, organizations and any others that have had opportunities for input, review or other aspects of the rulemaking.)

The workgroup appointed by the Land Reclamation Commission to draft these rules were the following members:

Senator John Russell
 Senator Sarah Steelman
 Ms. Linda Garrett - Texas County Commission
 Ms. Wilma Jeanne Urban - Texas County Planning Commission
 Mr. Charles "Bud" Dean - Phelps County commission
 Mr. Max Aubuchon - Gasconade County commission
 Mr. C. Russell Wood - Ozark Property Rights Congress
 Mr. Riley Godfrey - Private Landowner
 Mr. Ron Hardecke - Private Landowner – Gasconade county
 Mr. Bob Parker - Texas County Farm Bureau
 Mr. Charlie Davidson - Private Landowner
 Mr. Russ Andrews - Private Property Owner
 Mr. Chuck Tryon - Private Landowner, US Forest Service (Retired)
 Ms. Carla Kline / Ms. Cynthia Andre - Sierra Club
 Ms. Becky Denney - Missouri Stream Team Volunteer
 Mr. Al Agnew - Missouri Smallmouth Bass Alliance

Mr. Spencer Turner - Ozark Council, Trout Unlimited
Mr. Robert Temper - Ozark Fly Fishers
Mr. Steve Gough - American Fisheries Society (Missouri Chapter)
Ms. Kim Dickerson - Associated Electric Cooperative
Mr. Ted Heisel - Missouri Coalition for the Environment
Mr. Randy Scherr - Mining Industry Council
Mr. Mike Manier - Houston Redi-Mix
Mr. Mike Yamnitz / Ms Brenda Roling - Missouri Concrete Association, Inc.
Mr. Travis Morrison - Stewart-Morrison Redi Mix
Ms. Jane Martin - Scott's Concrete, Inc.
Ms. Cindy Peterson / Mr. Gary Peterson - Peterson Sand & Gravel Company
Mr. James Schupp - Lake Ozark Sand & Gravel Company
Mr. Ray Bohlken - Capital Sand Company
Mr. Tom Beard - U.S. Geological Survey
Ms. Suzanne Femmer - U.S. Geological Survey
Mr. Rick Hansen - US Fish & Wildlife Service
Mr. Louis Clarke - US Army Corps of Engineers
Mr. Bob Ziehmer - Missouri Department of Conservation
Mr. Michael Roell - Missouri Department of Conservation
Mr. Bill Turner - Missouri Department of Conservation
Ms. Mimi Garstang - Land Reclamation Commission
Ms. Kara Valentine - Department of Natural Resources, Legal Counsel
Mr. Scott Hamilton - Water Pollution Control Program (DNR)
Mr. Tom Cabanas - Land Reclamation Program (DNR)
Mr. Mike Larsen - Land Reclamation Program (DNR)

During public meetings before the Land Reclamation Commission, representatives from the industry, the concerned environmental organizations, public citizens, members of the legislature and their staff, representatives of public agencies and landowners were all given opportunities to comment about the rules. Everyone who wished to comment was given the opportunity to do so either in person, in writing or as a member of a commenting organization.

- **How has the development of the rule been shared with interested parties and the public at large?**

The Missouri Land Reclamation Commission, assisted by the Missouri Department of Natural Resources, worked with various stakeholders from 2001 to 2003 to review all the issues related to sand and gravel mining, and to come to consensus about stream protection standards that should be implemented by rule. This culminated in the currently proposed rules by way of a vote of the Land Reclamation Commission in May of 2003, and with verbal concurrence of each stakeholder group represented throughout the process. While selected individuals may not have been in agreement, spokespersons for each of the groups involved committed their assent to the current proposed rules.

- **What information was used to prepare the rulemaking?** (type, qualities and sources of information)

Throughout the rule workgroup process, much discussion was held regarding the scientific background for the need to protect streams from the effects of sand and gravel extraction. All available research studies and supporting documents were collected and provided to the Land Reclamation Commission to aid in their ability to make an informed decision. This was presented in a binder with three sections.

The first section referenced research completed by the US Geological Survey in which the economic benefits of gravel extraction were compared with the costs of environmental protection, the changes in streams were documented as a result of mining practices, various types of stream damages were investigated as a result of mining, and some analyses of aquatic habitats were discussed.

The second section referenced research completed in Missouri, principally by the Missouri Department of Conservation and the Missouri Department of Natural Resources. This research disclosed the damages that can occur in streams as a result of mining, along with discussions of how to best avoid causing these damages. There were also notes taken from various stakeholder meetings to document the concerns and thoughts of Missourians with interest in this topic. There were a total of four meetings held in various locations around Missouri in 2000, four meetings of the workgroup appointed by the Land Reclamation Commission in 2002 and two more formal hearings on the topic at commission meetings.

The third section provided references to research completed in other states, with similar concerns and documented affects of the mining of sand and gravel from streams.

None of the research truly quantified stream protection measures. For instance, most references that included discussions about buffer zones emphasized the need for buffers but did not suggest the appropriate size of a buffer. Also references that discussed headcutting and bank destabilization did not specify what depth of mining would be protective of these damaging results. Clearly, streams must be protected or the adverse affects of mining will impair Missouri streams. The question of how to create stream protection standards and how to measure them was only determined through negotiated stakeholder workgroup sessions. The current proposed rules are that product of stakeholder consensus.